IMPROVING FOOD SECURITY AND HOUSEHOLD INCOMES IN TANZANIA THROUGH DROUGHT TOLERANT QUALITY PROTEIN MAIZE (QPM)

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New Stress Tolerant Quality Protein Maize (QPM). Photo credit: Bright Jumbo/ICRISAT

BRIEF DESCRIPTION

- Traditional maize has poor protein quality, being deficient in essential amino acids
- Quality protein maize (QPM) is biofortified with elevated levels of essential amino acids
- Adoption of QPM is an attractive option to improve dietary quality for communities dependent on maize-based diets
- One limiting factor to the widespread adoption of QPM is the poor adaptability of commercially available varieties to drought-stressed environments

VALIDATION, SCALING SITES & SUITABLE AGROECOLOGIES FOR IMPLEMENTATION

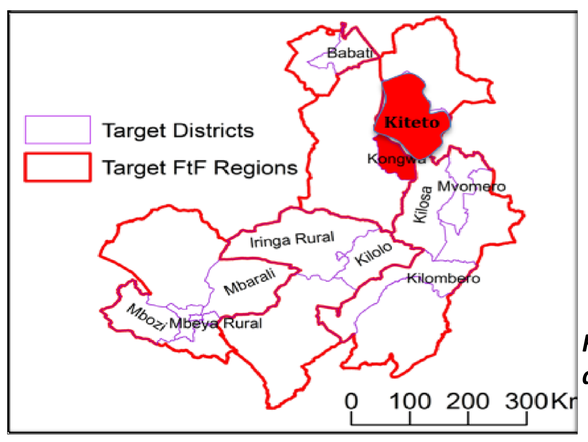

Fig. 1. Kongwa and Kiteto districts

- Five drought-tolerant QPM experimental hybrids were evaluated together with two commercial QPM hybrids (KILIMAQH06 and LISHE2) and one non-QPM hybrid (PAN 53, as local check)
- The study sites in Tanzania were in Kongwa and Kiteto districts.
- Two of the 5 experimental QPM hybrids; CZH132019Q and CZH132003Q were selected and released in Tanzania through Meru Agro Tours and Consultants seed company
- The selection was based on their high grain yield performance (Figure 2), improved economic performance (Figure 3), and adaptation to stressful environments

KEY BENEFITS

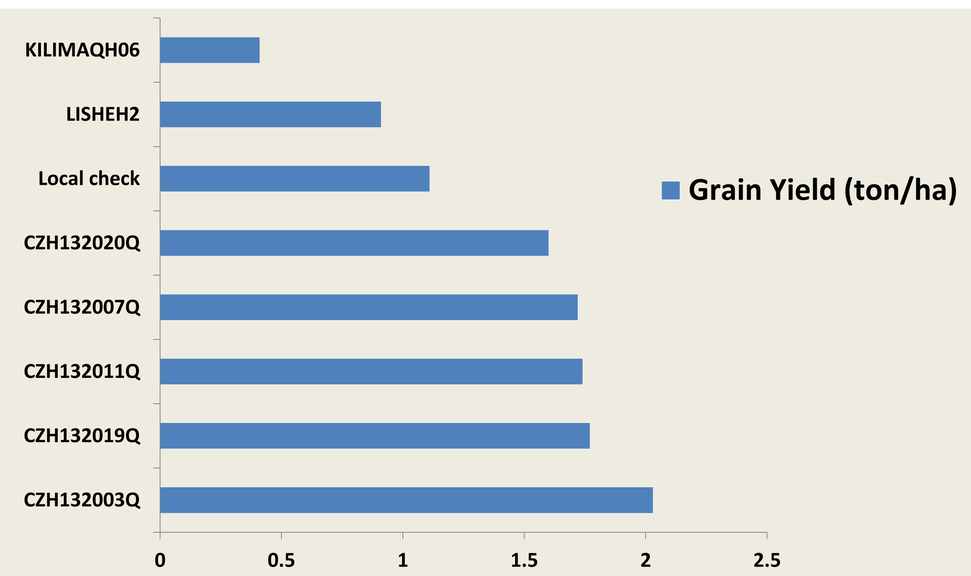

Fig 2. *Yield advantage of selected QPM under drought stress*

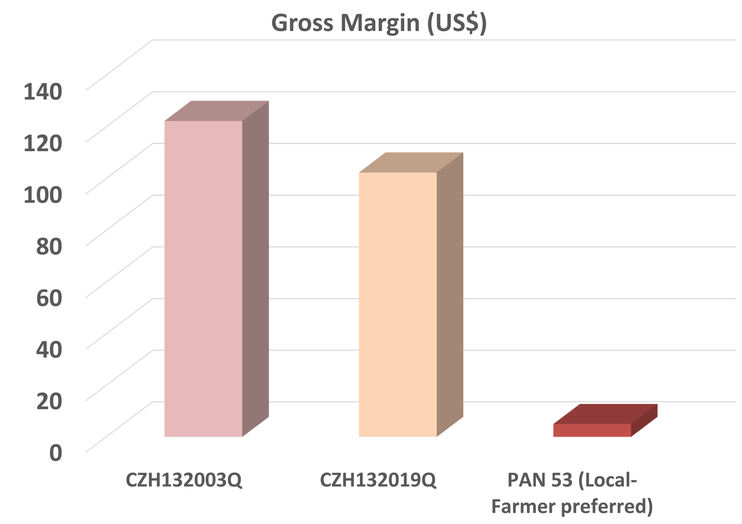

Fig. 3. *Selected QPM hybrids with higher gross margins*

PARTNERS INVOLVED

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